IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	)	
	)	
COOPER, ET AL.	)	
	)	Art Unit: **1632**
Serial No. **10/609,019**	)	
	)	Examiner: **Anoop Singh**
Filed: **June 26, 2003**	)	
	)	
For: **GENE REGULATION IN TRANSGENIC ANIMALS USING A TRANSPOSON-BASED VECTOR**	)	

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INTERVIEW SUMMARY AND ADDITIONAL REMARKS

Sir:

This communication is filed in response to an interview held on December 14, 2007, and an Interview Summary mailed on December 26, 2007.

Interview Summary

An interview was held on December 14, 2007. Attending the interview were Examiners Anoop Singh and Thaian N. Ton, as well as Applicants' representatives John McDonald and Cynthia Rothschild. Examiner Ton and Cynthia Rothschild attended by phone.

During the interview the response filed on October 31, 2007 was discussed. It was stated that whereas the amendments to the claims and the remarks appeared to overcome the rejections put forth in the office action of October 17, 2007, the Examiner would still need to consider additional art. Applicants thank the Examiners for taking the time to participate in the interview and helping to clarify the outstanding issues in the case.

Response to Interview Summary Mailed on December 26, 2007

The interview summary mailed on December 26, 2007, indicated that the Examiner considered the reference of Schulz et al., (J. Mol. Biol., 1991, 221, 65-80) as pertinent to Applicants' disclosure and pending claims. Applicants have previously distinguished Schulz in a response filed on September 26, 2006.

Thus, Applicants respectfully assert that as amended, Applicants' claimed vector includes a prokaryotic transposase wherein a plurality of the codons of the transposase gene that encode for amino acids 2-10 are modified from the wild-type sequence at the third base position of the codon to an adenine or thymine at those positions where the change does not modify the amino acid encoded by the codon. The reference cited by the Examiner (i.e., Schultz et al., J. Mol. Biol., 1991, 221:65-80) does not describe a transposase gene, wherein a plurality of the first ten codons of the transposase gene are modified from the wild-type sequence at the third base position of the codon to an adenine or thymine at those positions where the change does not modify the amino acid encoded by the codon, but in fact provides the first four codons of a wild-type transposase.

Nor does Schultz describe, teach or suggest such a modified transposase gene that comprises an A or T at the third position in some or each of codons 2-10 of the modified transposase gene, as provided by certain embodiments of Applicants' claimed vector. First, Shultz is concerned with translation of the transposase in prokaryotes by optimization of the Shine-Dalgarno sequence. Applicants are not optimizing the sequence for translation in a prokaryotic system but instead, are optimizing the sequence for transcription in a eukaryotic

system. Thus, Shultz, which is concerned with determining which residues are important to stabilize the Shine-Dalgarno sequence for translation of a transposase gene in prokaryotes, does not teach or suggest Applicants' claimed invention.

CONCLUSION

In view of the previously filed amendment and remarks, the interview of December 14, 2007, and the foregoing remarks, each of the claims remaining in the application is believed to be in condition for immediate allowance. Accordingly, the Examiner is respectfully requested to reconsider and withdraw the outstanding rejections. The Examiner is respectfully invited to telephone the undersigned at (336) 747-7541 to discuss any questions relating to the application.

Respectfully submitted,

Date: January 25, 2008

Cynthia B. Rothschild (Reg. No. 47,040)

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